

AMENDMENT TO THE CLAIMS

Claims 1 - 4 (Cancelled).

1 5. (Currently Amended) An ~~The~~ equine
2 dental apparatus ~~of claim 2~~ for floating the teeth of
3 horses comprising:

4 a tool body, wherein the tool body includes a
5 pivot joint having a pivot axis; .

6 a drive shaft disposed along a first axis
7 inside of the tool body, wherein the drive shaft
8 includes a first end configured for attachment to a
9 drive mechanism and a second end opposite the first
10 end, and further wherein the drive shaft includes a
11 first section disposed to rotate about the first axis,
12 a second section disposed to rotate about a second
13 axis, and a ball and socket joint disposed to couple
14 the second section to the first section, wherein the
15 ball and socket joint is disposed inside of the pivot
16 joint; and

17 a grinding member connected to the second end
18 and partially housed in the tool body, wherein when the
19 tool body is held in a fixed position with the drive
20 shaft oriented horizontally, the grinding member is
21 capable of pivoting upward through a first range of
22 angles relative to the drive shaft and is further
23 capable of pivoting downward through a second range of
24 angles relative to the drive shaft, and further wherein
25 the grinding member pivots through the range of angles
26 about the pivot axis.

1 6. (Currently Amended) An ~~The~~ equine
2 dental apparatus for floating the teeth of horses

3 ~~comprising of claim 2 wherein the apparatus further~~
4 ~~comprises:~~

5 a tool body, wherein the tool body includes a
6 pivot joint having a pivot axis;

7 a drive shaft disposed along a first axis
8 inside of the tool body, wherein the drive shaft
9 includes a first end configured for attachment to a
10 drive mechanism and a second end opposite the first
11 end;

12 a grinding member connected to the second end
13 and partially housed in the tool body, wherein when the
14 tool body is held in a fixed position with the drive
15 shaft oriented horizontally, the grinding member is
16 capable of pivoting upward through a first range of
17 angles relative to the drive shaft and is further
18 capable of pivoting downward through a second range of
19 angles relative to the drive shaft, and further wherein
20 the grinding member pivots through the range of angles
21 about the pivot axis; and

22 a vacuum port disposed to suction enamel dust
23 produced during the floating of teeth, wherein the
24 vacuum port passes through the pivot joint.

1 7. (Currently Amended) ~~An The~~ equine
2 dental apparatus for floating the teeth of horses
3 ~~comprising of claim 2 wherein the apparatus further~~
4 ~~comprises:~~

5 a tool body, wherein the tool body includes a
6 pivot joint having a pivot axis;

7 a drive shaft disposed along a first axis
8 inside of the tool body, wherein the drive shaft
9 includes a first end configured for attachment to a

10 drive mechanism and a second end opposite the first
11 end;

12 a grinding member connected to the second end
13 and partially housed in the tool body, wherein when the
14 tool body is held in a fixed position with the drive
15 shaft oriented horizontally, the grinding member is
16 capable of pivoting upward through a first range of
17 angles relative to the drive shaft and is further
18 capable of pivoting downward through a second range of
19 angles relative to the drive shaft, and further wherein
20 the grinding member pivots through the range of angles
21 about the pivot axis; and

22 a source of illumination disposed to
23 illuminate the teeth being floated, wherein the source
24 of illumination passes through the pivot joint.

1 8. (Previously Presented) The equine dental
2 apparatus of claim 7 wherein the source of illumination
3 includes a cable, wherein the cable passes through the pivot
4 joint.

1 9. (Previously Presented) The equine dental
2 apparatus of claim 8 wherein the cable is a fiber optic
3 cable.

1 10. (Currently Amended) ~~An The~~ equine dental
2 apparatus for floating the teeth of horses comprising of
3 ~~claim 1 wherein the apparatus further comprising:~~

4 a tool body;

5 a drive shaft disposed along a first axis
6 inside of the tool body, wherein the drive shaft
7 includes a first end configured for attachment to a

8 drive mechanism and a second end opposite the first
9 end;

10 a grinding member connected to the second end
11 and partially housed in the tool body, wherein when the
12 tool body is held in a fixed position with the drive
13 shaft oriented horizontally, the grinding member is
14 capable of pivoting upward through a first range of
15 angles relative to the drive shaft and is further
16 capable of pivoting downward through a second range of
17 angles relative to the drive shaft; and

18 a vacuum port disposed to suction enamel dust
19 produced during the floating of teeth, wherein a
20 portion of the vacuum port is disposed inside of the
21 tool body.

1 11. (Currently Amended) ~~An~~ The equine
2 dental apparatus for floating the teeth of horses
3 comprising of claim 1 wherein the apparatus further
4 comprising:

5 a tool body;

6 a drive shaft disposed along a first axis
7 inside of the tool body, wherein the drive shaft
8 includes a first end configured for attachment to a
9 drive mechanism and a second end opposite the first
10 end;

11 a grinding member connected to the second end
12 and partially housed in the tool body, wherein when the
13 tool body is held in a fixed position with the drive
14 shaft oriented horizontally, the grinding member is
15 capable of pivoting upward through a first range of
16 angles relative to the drive shaft and is further
17 capable of pivoting downward through a second range of
18 angles relative to the drive shaft; and

19 a source of illumination disposed to
20 illuminate the teeth being floated, wherein the source
21 of illumination is at least partially disposed inside
22 of the tool body.

1 12. (Previously Presented) The equine dental
2 apparatus of claim 11 wherein the source of illumination
3 includes a cable, wherein the cable is at least partially
4 disposed inside of the tool body.

1 13. (Previously Presented) The equine dental
2 apparatus of claim 12 wherein the cable is a fiber optic
3 cable.

Claims 14 - 19 (Cancelled).

1 20. (Currently Amended) An ~~The~~ equine
2 dental apparatus for floating the teeth of horses of
3 ~~claim 19 further~~ comprising:
4 a first drive shaft disposed along a first
5 axis and configured for attachment to a drive
6 mechanism;
7 a first housing member, wherein the first
8 drive shaft is at least partially disposed inside of
9 the first housing member;
10 a second drive shaft coupled to the first
11 drive shaft, wherein the second drive shaft pivots
12 relative to the first drive shaft about a second axis
13 different from the first axis, wherein the second axis
14 intersects the first axis;
15 a grinding member attached to the second
16 drive shaft;

17 a second housing member, wherein the second
18 drive shaft is at least partially disposed inside of
19 the second housing member; and
20 a pivot joint connecting the second housing
21 member to the first housing member, wherein the pivot
22 joint pivots about the second axis to allow the second
23 housing member to pivot relative to the first housing
24 member.

1 21. (Previously Presented) The equine dental
2 apparatus of claim 20 wherein the apparatus further
3 comprises a vacuum passageway disposed to suction enamel
4 dust produced during the floating of teeth, wherein the
5 vacuum passageway passes through the pivot joint.

1 22. (Previously Presented) The equine dental
2 apparatus of claim 20 wherein the apparatus further
3 comprises a source of illumination disposed to illuminate
4 the teeth being floated, wherein the source of illumination
5 passes through the pivot joint.

1 23. (Previously Presented) The equine dental
2 apparatus of claim 22 wherein the source of illumination
3 includes a cable, wherein the cable passes through the pivot
4 joint.

1 24. (Previously Presented) The equine dental
2 apparatus of claim 23 wherein the cable is a fiber optic
3 cable.

1 25. (Previously Presented) The equine dental
2 apparatus of claim 20 wherein the apparatus further
3 comprises a vacuum passageway disposed to suction enamel

4 dust produced during the floating of teeth, wherein a
5 portion of the vacuum passageway is disposed inside of the
6 first and second housing members.

1 26. (Previously Presented) The equine dental
2 apparatus of claim 20 wherein the apparatus further
3 comprises a source of illumination disposed to illuminate
4 the teeth being floated, wherein the source of illumination
5 is at least partially disposed inside of the first and
6 second housing members.

1 27. (Previously Presented) The equine dental
2 apparatus of claim 26 wherein the source of illumination
3 includes a cable, wherein the cable is at least partially
4 disposed inside of the first and second housing members.

1 28. (Previously Presented) The equine dental
2 apparatus of claim 27 wherein the cable is a fiber optic
3 cable.

Claims 29 - 36 (Cancelled).

1 37. (Previously Presented) An equine dental
2 apparatus for floating the teeth of horses comprising:
3 a first tool body member;
4 a second tool body member;
5 a drive shaft having a first section at least
6 partially disposed inside of the first tool body member
7 and a second section at least partially disposed inside
8 of the second tool body member, wherein the second
9 section is coupled to the first section, and further
10 wherein the first section is disposed to rotate about a
11 first axis;

12 a grinding member connected to the second
13 section of the drive shaft and at least partially
14 disposed inside of the second tool body member; and
15 a pivot joint connecting the first tool body
16 member to the second tool body member, wherein when the
17 first tool body member is held in a fixed position such
18 that the first axis is horizontal, the second tool body
19 member is capable of pivoting upward through a first
20 range of angles relative to the first tool body member
21 and is further capable of pivoting downward through a
22 second range of angles relative to the first tool body
23 member.

1 38. (Previously Presented) The equine dental
2 apparatus of claim 37 wherein the pivot joint further
3 includes a ball and socket joint disposed between the first
4 tool body member and the second tool body member.

1 39. (Previously Presented) The equine dental
2 apparatus of claim 38 wherein the ball and socket joint
3 couples the second section of the drive shaft to the first
4 section of the drive shaft.

1 40. (New) The equine dental apparatus of claim 6
2 wherein the apparatus is configured for attachment to an
3 external light source, and further wherein the apparatus is
4 configured to provide light from the external light source,
5 through at least a portion of the tool body, to the vicinity
6 of the grinding member.

1 41. (New) The equine dental apparatus of claim
2 40 further comprising the external light source.

1 42. (New) The equine dental apparatus of claim 7
2 wherein the apparatus is configured for attachment to an
3 external vacuum source, and further wherein the apparatus is
4 configured to provide vacuum suction from the external
5 vacuum source, through at least a portion of the tool body,
6 to the vicinity of the grinding member to suction material
7 produced during the floating of teeth.

1 43. (New) The equine dental apparatus of claim
2 42 further comprising the external vacuum source.

1 44. (New) The equine dental apparatus of claim
2 10 wherein the apparatus is configured for attachment to an
3 external light source, and further wherein the apparatus is
4 configured to provide light from the external light source,
5 through at least a portion of the tool body, to the vicinity
6 of the grinding member.

1 45. (New) The equine dental apparatus of claim
2 44 further comprising the external light source.

1 46. (New) The equine dental apparatus of claim
2 11 wherein the apparatus is configured for attachment to an
3 external vacuum source, and further wherein the apparatus is
4 configured to provide vacuum suction from the external
5 vacuum source, through at least a portion of the tool body,
6 to the vicinity of the grinding member to suction enamel
7 dust produced during the floating of teeth.

1 47. (New) The equine dental apparatus of claim
2 46 further comprising the external vacuum source.

1 48. (New) The equine dental apparatus of claim
2 20 wherein the pivot joint further includes a ball and
3 socket joint disposed between the first housing member and
4 the second housing member.

1 49. (New) The equine dental apparatus of claim
2 48 wherein the ball and socket joint couples the second
3 drive shaft to the first drive shaft.

1 50. (New) The equine dental apparatus of claim
2 37 wherein the apparatus further comprises a vacuum
3 passageway disposed to suction enamel dust produced during
4 the floating of teeth, wherein the vacuum passageway passes
5 through the pivot joint.

1 51. (New) The equine dental apparatus of claim
2 37 wherein the apparatus further comprises a source of
3 illumination disposed to illuminate the teeth being floated,
4 wherein the source of illumination passes through the pivot
5 joint.

1 52. (New) The equine dental apparatus of claim
2 51 wherein the source of illumination includes a cable,
3 wherein the cable passes through the pivot joint.

1 53. (New) The equine dental apparatus of claim
2 52 wherein the cable is a fiber optic cable.

1 54. (New) The equine dental apparatus of claim
2 37 wherein the apparatus further comprises a vacuum
3 passageway disposed to suction enamel dust produced during
4 the floating of teeth, wherein a portion of the vacuum

5 passageway is disposed inside of the first and second tool
6 body members.

1 55. (New) The equine dental apparatus of claim
2 37 wherein the apparatus further comprises a source of
3 illumination disposed to illuminate the teeth being floated,
4 wherein the source of illumination is at least partially
5 disposed inside of the first and second tool body members.

1 56. (New) The equine dental apparatus of claim
2 55 wherein the source of illumination includes a cable,
3 wherein the cable is at least partially disposed inside of
4 the first and second tool body members.

1 57. (New) The equine dental apparatus of claim
2 56 wherein the cable is a fiber optic cable.